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PART 70

TECHNICAL SUPPORT DOCUMENT

(STATEMENT of BASIS)

APPLICATION FOR:
**Operating Permit Significant Revision and
Reopenings for Cause**

PREPARED BY:
Broadbent & Associates, Inc.
For
PABC0 Building Products, LLC.

Source Name: PABC0 Building Products, LLC
Source ID: 11

SOURCE LOCATION:
8000 East Lake Mead Boulevard
North Las Vegas, Nevada 89124

SIC 3275: Gypsum Products
NAICS Code 327420: Gypsum Product Manufacturing

TSD Date: December 28, 2021

EXECUTIVE SUMMARY

PABCO Gypsum, a division of PABCO Building Products, LLC, is a wallboard manufacturing facility that falls under SIC code 3275, “Gypsum Products,” and NAICS code 327420, “Gypsum Product Manufacturing.” The facility is located in Hydrographic Area 215 (the Black Mountains area), which is classified as attainment for all regulated air pollutants. The source is subject to the requirements of 40 CFR Part 60, Subparts IIII, OOO, and UUU, and 40 CFR Part 63, Subpart ZZZZ. It is neither a categorical stationary source as defined in AQR 12.2.2(j) nor belongs to a stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the Act. Therefore, fugitive emissions are not included in source status determination. The source is a major stationary source for NO_x and CO, a synthetic minor source for PM₁₀, PM_{2.5}, and VOC, and a minor source for, SO₂, and HAP.

The PABCO operation includes the mining, crushers, screens, calciners, aggregate dryers, impeller mills, mixers, storage bins, conveyors, and board dryers needed to manufacture wallboard panels. Gypsum ore is mined from an on-site quarry, passed through several beneficiation processes, and stored prior to its use in the manufacturing processes. Under the primary operating scenario, PABCO receives exhaust gas from the co-located power-generating facility owned and operated by Nevada Cogeneration Associates #2 (NCA #2) to operate the Coe board dryer. The alternative operating scenario, in which the Coe board dryer uses its own burners, is triggered when NCA #2 turbine exhaust gas is unavailable. In addition to the wallboard manufacturing operations, the source operates diesel-powered water pumps and an aboveground gasoline storage tank.

To reduce waste, a reclaim/reuse process recycles approximately 4% of all manufactured wallboard that does not meet industry specifications.

Table 1 summarizes the source PTE for each regulated air pollutant for all emission units addressed by this Part 70 Operating Permit.

Table 1. Source PTE (tons per year)

Pollutants	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP	CO _{2e}
Nonfugitive Emissions	67.34	28.87	295.00	444.39	3.85	78.60	7.40	292,046
Fugitive Emissions	61.65	7.41	4.70	16.55	0.84	0	0	0.33
Source PTE	128.99	36.28	299.70	460.94	4.69	78.60	7.40	292,046.33
Major Source Thresholds (Title V)	100	100	100	100	100	100	10/25	
Major Source Thresholds (PSD)	250	250	250	250	250	250	10/25	

TABLE OF CONTENTS

I.	SOURCE INFORMATION	5
II.	PROCESS DESCRIPTION	5
III.	PERMITTING ACTION	5
IV.	FACILITY EMISSION UNITS.....	7
V.	EMISSIONS CALCULATIONS	13
VI.	CONTROL TECHNOLOGY	14
VII.	OPERATIONAL LIMITS	14
VIII.	REVIEW OF APPLICABLE REGULATIONS.....	14
IX.	MONITORING	15
X.	PERFORMANCE TESTING	15
XI.	INCREMENT ANALYSIS	15
XII.	PUBLIC PARTICIPATION	16
	ATTACHMENTS	16

ACRONYMS AND ABBREVIATIONS

ANFO	ammonium nitrate-fuel oil
AQR	Clark County Air Quality Regulation
BACT	best available control technology
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CH ₄	methane
CO	carbon monoxide
CO ₂ e	carbon dioxide equivalent
DAQ	Division of Air Quality
DES	Clark County Department of Environment and Sustainability
EPA	U.S. Environmental Protection Agency
EU	emission unit
GDO	gasoline dispensing operation
H ₂ S	hydrogen sulfide
hp	horsepower
gpm	gallons per minute
MMBtu	British thermal units (in millions)
N ₂ O	nitrous oxide
NAICS	North American Industry Classification System
NOV	notice of violation
NO _x	nitrogen oxide(s)
O&M	operations and maintenance
Pb	lead
PM _{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
PM ₁₀	particulate matter less than 10 microns in aerodynamic diameter
ppm	parts per million
PTE	potential to emit
RACT	reasonably available control technology
RT	round trip
SDE	status determination emissions
SIC	Standard Industrial Classification
SO ₂	sulfur dioxide
TDS	total dissolved solids
VAEL	voluntary accepted emission limit
VMT	vehicle miles traveled
VOC	volatile organic compound

I. SOURCE INFORMATION

Preparer: Scott Chappell
Action Received: January 28, 2021 and February 2, 2021
Permittee: PABCO Building Products, LLC
Source ID #: 11
Source name: PABCO Building Products, LLC
Source address: 8000 East Lake Mead Boulevard, Las Vegas, NV 89124

II. PROCESS DESCRIPTION

PABCO has organized the various operations into groups, as described in the emission unit list. A detail description is not included in this TSD because there are no changes in the operations proposed by this permitting action. Affected processes are described in the permitting action section of this TSD.

III. PERMITTING ACTION

This permitting action addresses multiple applications, two reopening for cause to address PM_{2.5} emissions and fugitive emissions, and an operating permit revision to incorporate terms of a hearing officer order (HOO). The source is currently operating under the Title V operating permit that will expire on January 28, 2025.

The reopening for cause action were initiated by DES on January 28, 2021 and September 2, 2021. This was done to comply with an EPA mandate to include PM_{2.5} emissions for all emission units and to assure compliance with the applicable requirements of revised AQRs. On March 5, 2021, the permittee provided PM_{2.5} emission factors, along with PTE calculations for all emission units operated by the source. The source PTE has been updated accordingly.

The source entered into a settlement agreement with DES in response to the issuance of NOV #9442. This settlement agreement was finalized by the Clark County Pollution Hearing Board on November 19, 2020. The source submitted an application for a minor revision on February 2, 2021(Certain changes proposed by this application were reclassified as a significant revision on July 17, 2021). The operating permit is being revised to incorporate specific requirements as mandated by the HOO as follows:

- Installation of a Polyethylene cover for the reserve stockpile (part of EU: M1).
- Creation of an SOP for proper operation, maintenance and replacement of the polyethylene cover.
- Employee training for safe access and coverage of the reserve stockpile along with proper maintenance of the covering.
- Replacement of the ductwork connecting EUs: B25, and K04 through K07 to Baghouse 1.

Revisions not mandated by the Hearing Officer Order include the following:

- Addition of two feeders identified as EUs: E43 and H37.

- Increase in annual throughput for the PIN mixer (EU: H22).
- Addition of silicone to inks and additives (EUs: E40 and H36).
- Revision to emission factors for PM₁₀, PM_{2.5}, CO and VOC for the Flakt dryer (EU: H26).

Revision to emission factors for PM₁₀, PM_{2.5}, CO and VOC for the Flakt dryer (EU: H26)

This revision is being proposed to address discrepancies between the emission calculations associated with the Boardline #2 (Group 8) wallboard dryers. Boardline #2 includes two ABB Flakt wallboard dryers (EU's: H26 and H32). PABCO reviewed the emission limits and the emission factors used to establish the emission limits in the current permit and noted discrepancies between the emission factors used for PM₁₀, PM_{2.5}, CO and VOC. Based on PABCO's review of past applications, it was determined that the discrepancies resulted because the emission factors that were used to calculate emissions for EU: H32 for these pollutants were based on a more recent edition of AP-42 Section 1.4 (7/ 98). This application proposed to revise the emissions for EU: H26 consistent with the calculation for emissions associated with EU: H32.

On May 2, 2021, DAQ deemed the application for revision of PTE for EU: H26 incomplete. DAQ requested the source to revise the application by proposing emission factors based on performance test results rather than AP-42. It is DAQ policy that AP-42 factors are used for emission calculations when there are no site specific/emission unit specific data available. Because PABCO had multiple performance tests conducted on EU: H32 and one test on H26, a revision to the emissions calculations could be more appropriate using these performance test data. The source was requested to propose revisions to emission calculations for both EUs: H26 and H32.

On May 27, 2021, PABCO submitted a revision to emission calculations for EUs: H26 and H32 based on past performance test data. On June 3, 2021, DAQ deemed the application incomplete again when multiple inconsistencies in the methodology were identified.

PABCO submitted revised applications and supplemental information on July 19 and August 16, 2021. The application for revision was deemed complete on August 26, 2021. PABCO provided new PTE calculations for NOx, CO and VOC for EU: H26 using the quantity of water evaporated by the dryer as it relates to actual heat input during the most recent performance testing. This new approach was based on GYPsum TECHnologies Inc. (GYPTECH) guarantee for board dryer performance of 1,470 BTU/lbs of evaporated water. DAQ accepted this approach and decided to revise the PTE for EU: H26. The increase in emissions is not counted towards emission increase calculations for modifications. The permit incorporates all necessary monitoring, recordkeeping and reporting conditions in order to demonstrate compliance with the revised approach. Additionally, the source is required to conduct performance testing within six months of issuance of the revised permit. This action is reclassified as a significant revision of the OP.

Truck loading (EU: T01) was added with the operating permit issued on June 10, 2020. Although a description of this activity was added to the emission unit list, the emissions did not get added to the total source PTE. This has been corrected with this permitting action.

Emission Statement

DAQ has identified this source as possibly emitting 25 tons or more of actual emissions for oxides of nitrogen (NOx) and/or volatile organic compounds (VOCs) in any calendar year. Clark County was required to implement Section 182(a)(3)(B) of the Clean Air Act (CAA) which requires all

ozone nonattainment areas to have in place a program that requires emissions statements from stationary sources of NOx and/or VOCs.

Section 12.9.1 of the Clark County Air Quality Regulations (AQRs) codifies this requirement for Clark County and states the following:

- a. The Responsible Official of each Stationary Source that emits 25 tons or more of NOx and/or VOC shall submit an Annual Emissions Statement (Statement) to the department for the previous calendar year.
- b. Pursuant to CAA Section 182, the Statement must include all actual emissions for all NOx and VOC emitting activities.
- c. The Statement shall be submitted to and received by the department on or before March 31 of each year or other date, upon prior notice by the Control Officer, and shall include a certification that the information contained in the Statement is accurate to the best knowledge of the individual certifying the Statement.

A condition requiring submittal of annual emission statement has been included in the permit.

AQR 92 and 94 reopening for cause

This source is an existing major source that has a Title V operating permit. DAQ is reopening and revising the permit pursuant to Sections 12.5.2.15 of the Clark County Air Quality Regulations (AQR), which maintain that the Control Officer may reopen and revise a permit “to assure compliance with the applicable requirements.” This permit is revised to include recently promulgated fugitive dust requirements for stationary sources.

AQR Sections 92 (Fugitive Dust from Unpaved Parking Lots and Storage Areas) and 94 (Permitting and Dust Control for Construction Activities) were recently revised to address fugitive dust at stationary sources. The revised regulations became effective on August 17, 2021. Subsections 92.1(c) and 94.1.1(a) require that the control measures and stabilization standards therein be made enforceable by the terms and conditions of the stationary source permit.

The source’s permit has been revised to include these fugitive dust requirements.

IV. FACILITY EMISSION UNITS

Emission Units

Table IV-1 lists the emission units at this stationary source.

Table IV-1: Emission Unit List

EU	Description	Rating	Make	Model #	Serial #	SCC
Quarry Operations (Group #1)						
A1	Material Handling					30502099
A5	Blasting					30504001
	Drilling					30504002
Beneficiation Operations (Group #2)						
B1	Hopper Feeder					30501503
B2	Primary Crusher	615 tph	Pioneer	VS4248	403748	30501505

EU	Description	Rating	Make	Model #	Serial #	SCC
B3	Conveyor System (5 belts & stacker)					30501504
B37	Apron Feeder (2 bins)					30501504
S07	Ore Reclaim Belt					30501504
B40	Screen	615 tph	JCI	6202-32LF	S071888	30501507
B42	Screen Collection Belt					30501504
B41	Hammer Mill	615 tph	Universal Engineering	7036598	306X615	30501506
S13	Recycle Belt					30501504
B36	Rotary Dryer #2	615 tph; 90 MMBtu/hr	Gencor	70x10/8"	M37.11.7001	30501501
B25	Conveyor System (3 belts)					30501504
B28	Dome Stockpile	1.13 Acres				30501508
B29	Conveyor System (2 belts); Dome Bypass (alternate scenario)					30501504
B34	Hopper Feeder					30501503
B34	Hopper Feeder					30501503
B35	Hopper Bin					30501509
B32	Conveyor Belt Drop					30501504
B33	Conveyor Belt Drop					30501504

Truck Loading (Group 2a)

T01	Truck Loading					30502506
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Boardline #1 Calcining Operation (Group #4)

D1	Belt Feeder Drop from Dome					30501504
D2	Belt Feeder Drop from Dome					30501504
D3	Belt Feeder Drop from Dome					30501504
D4	Conveyor Belt Drop					30501504
D43	Transfer Station Screen	180 tph	FMC	65	D-801401	30501507
D44	Transfer Station Crusher	30 tph	American Pulverizer	18x18	8133	30501506
D5	Variable Splitter					30501504
D6	Bypass Conveyor					30501504
D7	Conveyor Belt Drop					30501504
D8	Tripper Station					30501504
D9	Screw Conveyor					30501504
D18	Screw Conveyor					30501504
D27	Screw Conveyor					30501504
D10	Rock Bin #1					30501509
D11	Impeller Mill #1	10 tons/hr, 5 MMBtu/hr	CE Raymond	50		30501511
D13	Rock Bin #2					30501509
D14	Impeller Mill #2	10 tons/hr, 5 MMBtu/hr	CE Raymond	50	64017	30501511
D16	Rock Bin #3					30501509

EU	Description	Rating	Make	Model #	Serial #	SCC
D17	Impeller Mill #3	10 tons/hr, 5 MMBtu/hr	CE Raymond	50		30501511
D19	Rock Bin #4					30501509
D20	Impeller Mill #4	10 tons/hr, 5 MMBtu/hr	CE Raymond	50	84021	30501511
D22	Rock Bin #5					30501509
D23	Impeller Mill #5	10 tons/hr, 5 MMBtu/hr	CE Raymond	50		30501511
D25	Rock Bin #6					30501509
D26	Impeller Mill #6	10 tons/hr, 5 MMBtu/hr	CE Raymond	50		30501511
D28	Rock Bin #7					30501509
D29	Impeller Mill #7	10 tons/hr, 5 MMBtu/hr	CE Raymond	50	86003	30501511
D31	Rock Bin #8					30501509
D32	Impeller Mill #8	10 tons/hr, 5 MMBtu/hr	CE Raymond	50	86002	30501511
D34	Rock Bin #9					30501509
D35	Impeller Mill #9	10 tons/hr, 5 MMBtu/hr	CE Raymond	50	86054	30501511
D36	Screw Conveyor System (6 screw conveyors)					30501504
D42	Screw Conveyor					30501504

Boardline #1 Wallboard Manufacturing (Group #5)

E1	Stucco Elevator #1A					30501504
E2	Screw Conveyor					30501504
E3	Stucco Bin #1					30501514
E4	Screw Conveyor					30501504
E5	Entoleter Elevator					30501504
E6	Transfer Point					30501504
E7	Entoleter (Mill)	45 tph	Entoleter, Inc	Series 27/40	5129	30501502
E8	Screw Conveyor					30501504
E9	Screw Conveyor					30501504
E10	Stucco Elevator #1					30501504
E11	Screw Conveyor					30501504
E12	Stucco Bin #2					30501514
E13	Rotary Valve					30501504
E14	Bin #2 Discharge Screw					30501504
E15	Transfer Point					30501504
E16	Scalping Screw					30501504
E17	Scale (Transfer Point)					30501504
E18	Return Screw					30501504
E19	Stucco Recirculating Elevator					30501504
E20	Bin Recirculation Screw					30501504
E21	Rotary Valve					30501504
E22	Live Bottom Bin					30501514

EU	Description	Rating	Make	Model #	Serial #	SCC
E23	Metering Screw Conveyor					30501504
E23a	Line #1 Paper Heater	4.625 MMBtu/hr	Style B Linoflame Burners		60693	30501503
E25	Accelerator Bin					30501503
E26	Feeder					30501504
E27	Additive Bin					30501503
E27a	Additive Bin/Feeder		Acrision	BDF1.5-GG/2	05467-01	30501503
E29	Additive Bin					30501503
E31	Additive Bin					30501503
E33	Additive Bin					30501503
E28	Feeder					30501504
E30	Feeder					30501504
E32	Feeder					30501504
E34	Feeder					30501504
E43 (new)	Feeder					30501504
E24	Mixing Screw Conveyor					30501504
E35	Mixer	90 tph	Broder Machine	5750	8150	30501516
E37	End Saw					30501521
E37a	End Saw Bunker/Disposal		Fabricated On-site			30501514
E39	Coe Board Dryer	110 MMBtu/hr				30501520
E40	Printing and Other VOC-Containing Materials					30501503
E41	Dunnage/Slutter system		Sweetwater Machine and Welding			30501521
E42	Cutback Saw Process		Fabricated On-site			30501521

Accelerator System (Group #6)

F1	Screw Conveyor					30501504
F2	Vacuum Feed					30501504
F3	Storage Bin					30501509
F4	Storage Bin					30501509
F5	Crusher	6 tph	Mikropulverizer	44		30501506
F6	Screw Conveyor					30501504
F7	Ball Mill	1 tph	Service Welding and Machine	3x19		30501515
F8	Elevator Conveyor					30501504

Boardline #2 Calcining Operations (Group #7)

G1	Screw Conveyor Drop					30501504
G12	Screw Conveyor Drop					30501504
G2	Rock Bin #10					30501509
G3	Impeller Mill #10 – Aggregate	19 MMBtu/hr	Alston	83	97036	30501511
G4	Double Cone Classifier					30501504
G5	Cyclone Collector					30501509

EU	Description	Rating	Make	Model #	Serial #	SCC
G7	Rock Bin #11					30501509
G8	Impeller Mill #11	19 MMBtu/hr	Alston	83	97037	30501511
G9	Double Cone Classifier					30501504
G10	Cyclone Collector					30501509
G13	Rock Bin #12					30501509
G14	Impeller Mill #12	22.5 MMBtu/hr	Alston	83	93019	30501511
G15	Double Cone Classifier					30501504
G16	Cyclone Collector					30501509
G18	Rock Bin #13					30501509
G19	Impeller Mill #13	22.5 MMBtu/hr	Alston	83	93020	30501511
G20	Double Cone Classifier					30501504
G21	Cyclone Collector					30501509
G6	Feed Screw Conveyor Drop					30501504
G11	Feed Screw Conveyor Drop					30501504
G17	Feed Screw Conveyor Drop					30501504
G22	Feed Screw Conveyor Drop					30501504

Boardline #2 Wallboard Manufacturing (Group #8)

H1	Stucco Storage Bin #3					30501514
H2	Stucco Storage Bin #4					30501514
H3	Stucco Screw Conveyor					30501504
H4	Stucco Bucket Elevator					30501504
H5	Recirculating Screw Conveyor					30501504
H7	Stucco Feed Elevator					30501504
H8	Stucco Metering					30501514
H6	Stucco Surge Bin					30501514
H11	Additive Bin					30501503
H11a	Additive Bin/Feeder					30501503
H13	Additive Bin					30501503
H15	Additive Bin					30501503
H19	Additive Bin					30501503
H17	Accelerator Bin					30501503
H12	Feeder					30501504
H14	Feeder					30501504
H16	Feeder					30501504
H18	Feeder					30501504
H20	Feeder					30501504
H37 (new)	Feeder					30501504
H20a	Line #2 Paper Heater	5.25 MMBtu/hr	Style B Linoflame Burners		51838	30501520

EU	Description	Rating	Make	Model #	Serial #	SCC
H10	Mixing Screw Conveyor					30501504
H22	Pin Mixer		Broeder Machine Works	8600		30501518
H24	End Saw					30501521
H26	Flakt Board Dryer Combustion Zone 1	87.32 MMBtu/hr	ABB Flakt			30501520
H27	Stucco Storage Bin #5					30501514
H28	Stucco Screw Conveyor					30501504
H29	Recirculating Screw Conveyor					30501504
H30	End Saw					30501521
H32	Flakt Board Dryer Combustion Zone 1	45 MMBtu/hr	ABB Flakt			30501520
	Combustion Zone 2	45 MMBtu/hr				
	Combustion Zone 3	30 MMBtu/hr				
H33	Stucco Cooler		Gyptech	GKL52690	PALV-0940-ER6565	30501503
H34	Stucco Screw Conveyor					30501504
H35	Stucco Screw Conveyor					30501504
H36	Printing and Other VOC-Containing Materials					30501503

Cooling Towers (Group #9)

I01	Cooling Tower	1,200 gpm	Evapco	ATW207C	988659W	38500101
I02	Cooling Tower	1,200 gpm	Evapco	ATW207C	988659W	38500101
I03	Cooling Tower	3,495 gpm	Baltimore Aircoil	3473A-2	TBD	38500101

Gasoline Dispensing Operation (Group #10)

J01	Aboveground Storage Tank; Regular Gasoline	10,000 gallons				40600306
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Reclaim/Reuse Process (Group #11)

K01	Screw Grinder		ACTA Recycling	AR-GS-6	001612021	30501502
K02	Perforated Screw Conveyor		Martin Screw	TBD		30501504
K04	Belt Conveyor	20 tons/hr				30501504
K05	Roller Mill	19.2 tons/hr	Antenore Visentin	RO12C	115-12	30501502
K06	Vibratory Screen	19.2 tons/hr				30501507
K07	Conveyor System (3 belts)					30501504
K10	Storage Bin					30501510
K11	Screw Conveyor System (3 conveyors)					30501504

Pumps (Group #12)

U03	Diesel Water Pump; DOM: 2012	464 hp	Cummins	QSL9-G7NR3	L120435661	20200102
U04	Diesel Emergency Fire Pump; DOM: 2007	240 hp	John Deere	6068HF120	PE606846834 02	20200102

EU	Description	Rating	Make	Model #	Serial #	SCC
U05	Diesel Emergency Fire Pump; DOM: 2007	240 hp	John Deere	6068HF120	CD6068B020 341	20200102
U06	Diesel Water Pump; DOM: 2002	85 hp	Perkins	1004-42	AR36677	20200102
Stockpiles and Haul Roads						
M1	Stockpiles	90 Acres				30502507
K14	Haul Road; Unpaved	14.2 VMT/hr				30502504
	Haul Road; Paved	2.3 VMT/hr				

Table II-2: Insignificant Activities

Description
Aboveground Storage Tank; Diesel; 10,000 gallons
Aboveground Storage Tanks (2); Diesel; 1,000 gallons
Aboveground Storage Tank; Diesel (2); 300 gallons
Aboveground Storage Tank; Diesel; 550 gallons

V. EMISSIONS CALCULATIONS

Applicability and SDE

It has already been established that PABCO is a major source for regulated air pollutants. Therefore, it is not necessary to conduct a source applicability determination. However, the specific pollutants for which PABCO was previously deemed to be a major source may have changed. It is for this reason a status determination is included. Status Determination Emissions (SDEs) are based on maximum throughputs, or 8,760 hours of operation, and include any inherent controls. PABCO is not a categorical source, as defined in AQR 12.2.2(j), so fugitive emissions (EUs: A5, M1 and K14) are not included in SDE calculations.

Table 2: Status Determination Emissions

Pollutant	PM ₁₀	PM _{2.5}	NOx	CO	SO ₂	VOC	HAP
Major Source Thresholds	100	100	100	100	100	100	10/25 ¹
Nonattainment NSR Thresholds	100	100	100	100	100	100	none
PSD Thresholds	250	250	250	250	250	250	none
SDE	13,256.24	1,863.07	302.65	454.86	3.81	213.16	7.42

¹10 tons for any single HAP or 25 tons for any combination of HAP pollutants.

PTE

Table 3: Source PTE

PM ₁₀	PM _{2.5}	NOx	CO	SO ₂	VOC	HAP	CO _{2e}
128.99	36.28	299.70	460.94	4.69	78.60	7.40	291,607.89

Table 4. Emissions Increase Calculation and Significance Evaluation (tons per year)

	PM₁₀	PM_{2.5}	NO_x	CO	SO₂	VOC	HAP
PTE for Current Permitting Action	128.99	36.28	299.70	460.94	4.69	78.60	7.40
PTE from Permit Issued 06/10/2020	128.95	21.51	308.20	425.62	4.69	73.13	7.40
Difference	0.04	14.77	-8.50	35.32	0	5.47	0
Excluded PTE ¹	0	14.77	-8.50	35.32	0	0.75	0
Total Source Emissions Increase	0.04	0	0	0	0	4.72	0
AQR 12.2.2(uu) Significance Thresholds	15	10	40	100	40	40	10
AQR 12.4 Minor NSR Significance	7.5	5	20	50	20	20	10

¹The Increases in PM_{2.5} associated with the “Reopen for Cause” permitting action and the increases in products of combustion associated with the revised emission factors for the Flakt board dryer (EU H26) are excluded from emission increase calculations.

VI. CONTROL TECHNOLOGY

The emission increases associated with this permitting action are below the AQR 12.2.2(uu) significant thresholds. Therefore, a BACT analysis is not required. All BACT requirements established with previous permitting actions remain enforceable. The calculated emission increase is also below the Minor NSR significance and therefore, a RACT analysis is not triggered for the proposed changes.

Control requirements associated with this permitting action, as required by the November 19, 2020 Hearing Officer Order include:

Reserve Stockpile

The permittee shall install and maintain a 200' x 200' BTL-20 scrim reinforced polyethylene lining which will cover the entire reserve stockpile no later than March 17, 2021. The cover shall remain in-place, over the entire stockpile and maintained in good working order at all times, except when personnel are actively working the pile, and only in those areas being worked.

Baghouse 1 Ductwork

The permittee shall replace the existing ducting to the partially enclosed conveyor belt, conveyor system drops/transitions (EUs: B25, and K04 through K07) with one engineered main line which is designed to connect these emission units to Baghouse 1. After completing the installation of the ductwork, the permittee shall measure the air velocity, and balance the dust collecting system to optimize performance.

VII. OPERATIONAL LIMITS

All operational limitations are defined in the operating permit. The source proposed an increase to the annual throughput for the PIN mixer (EU: H22) and the addition of silicone to the inks and additives throughput, which were addressed in this permitting action.

VIII. REVIEW OF APPLICABLE REGULATIONS

1. Pursuant to Section 43 of the AQR, this facility shall be operated in a manner such that odors will not cause a nuisance

2. Pursuant to Section 25 of the AQR, any upset/breakdown or malfunction which causes emissions of regulated air pollutants in excess of any limits set by the AQR shall be reported to the Control Officer, by phone, within twenty four (24 hours) hours of the time the permittee learns of the event.
3. The Source is subject to the requirements of 40 CFR Part 60, Subpart OOO: *Standards of Performance for Nonmetallic Mineral Processing Plants*.
4. No new federal applicable requirements have been triggered by this revision.

IX. MONITORING

All monitoring requirements are identified in the operating permit. The source is being required to monitor the monthly heat input to the Flakt Dryer #2 (EU: H26) to demonstrate compliance with its PTE. The permit provides two methodologies for demonstrating Btu consumption; the source can install a fuel flow meter; or the source can calculate the amount of moisture removed during the drying process and back-calculate the required Btu consumption based on a guarantee provided by the dryer vendor (Gypsum Technologies Inc.).

X. PERFORMANCE TESTING

The source is being required to conduct a new initial performance test on the Flakt Dryer #2 (EU: H26) to demonstrate compliance with its Btu consumption and PTE. This initial test will be required within 180 days of the issuance of the revised permit.

XI. INCREMENT ANALYSIS

PABCO Gypsum is a major source in Hydrographic Area 215 (Black Mountains Area). Permitted emission units include gypsum mining and processing. Since minor source baseline dates for NO_x (July 19, 1989) and PM₁₀ (June 18, 1993) have been triggered, Prevention of Significant Deterioration (PSD) increment analysis is required.

DAQ modeled the source using AERMOD to track the increment consumption. Stack data submitted by the applicant were supplemented with information available for similar emission units. Five years (2011 to 2015) of meteorological data from the McCarran Station were used in the model. U.S. Geological Survey National Elevation Dataset terrain data were used to calculate elevations. Table XI-1 shows the location of the maximum impact and the potential PSD increment consumed by the source at that location. The impacts are below the PSD increment limits.

Table XI-1: PSD Increment Consumption

Pollutant	Averaging Period	Source's PSD Increment Consumption ($\mu\text{g}/\text{m}^3$)	Location of Maximum Impact	
			UTM X (m)	UTM Y (m)
PM ₁₀	24-hour	7.40 ¹	688628	4009853
PM ₁₀	Annual	1.68	691894	4013459
NO _x	Annual	5.39	693435	4006130

¹Highest Second High Concentration.

XII. PUBLIC PARTICIPATION

Pursuant to AQR 12.5.2.17, the Control Officer shall provide for public notice, comment, and an opportunity for a hearing on initial permit issuances, significant revisions, reopenings for cause, and renewals in accordance with the procedures outlined in the regulation. This is a significant revision of the OP with various reopenings for cause. The source meets the criteria requiring public participation according to 12.5.2.17.

Attachments

A-1. SDE Calculations (non-combustion units)

EU	Description	Throughput		PM ₁₀ EF (lbs/ton)	PM ₁₀ EF (lbs/ton)	CF	PM ₁₀ (tons/yr)	PM ₁₀ (tons/yr)
		tons/hr	tons/yr					
A1	Material Loading	408	3,574,080	1.38E-05	0.0022	1	0.02	3.93
B1	Hopper Feeder	615	5,387,400	6.90E-06	0.0011	1	0.02	2.96
B2	Hopper Feeder to Crusher	615	5,387,400			1	0.22	6.46
	Primary Crusher	615	5,387,400	8.10E-05	0.0024			
	Crusher to Conveyor	615	5,387,400					
B3	Conveyor Belt to Conveyor Belt	615	5,387,400	6.90E-06	0.0011	1	0.09	14.80
	Conveyor Belt to Conveyor Belt	615	5,387,400	6.90E-06	0.0011	1		
	Conveyor Belt to Conveyor Belt	615	5,387,400	6.90E-06	0.0011	1		
	Conveyor Belt to Transfer Belt	615	5,387,400	6.90E-06	0.0011	1		
	Transfer Belt to Stacker	615	5,387,400	6.90E-06	0.0011	1		
B37	Apron Feeder to Ore Reclaim Belt	615	5,387,400	6.90E-06	0.0011	1	0.02	2.96
S07	Ore Reclaim Belt	615	5,387,400	Included with B40			0	0
B40	Ore Reclaim Belt to Screen	615	5,387,400			1	0.40	193.95
	Screen	615	5,387,400	1.50E-04	0.072			
	Screen to Collection Belt	615	5,387,400					
	Screen to Hammer Mill	615	5,387,400					
B42	Collection Belt	615	5,387,400	6.90E-06	0.0011	1	0.02	2.96
B41	Hammer Mill to Recycle Belt	615	5,387,400	8.10E-05	0.0024	1	0.22	6.46
S13	Recycle Belt	615	5,387,400	6.90E-06	0.0011	1	0.02	2.96
B25	Rotary Dryer to Conveyor Belt	615	5,387,400	1.65E-04	0.0011	1	1.33	8.88
	Conveyor Belt to Conveyor Belt	615	5,387,400	1.65E-04	0.0011	1		
	Conveyor Belt Drop into Dome	615	5,387,400	1.65E-04	0.0011	1		
B28	Dome Stockpile	1.13 Acres		0.249 lb/acre-day	1.66 lb/acre-day	0.1	0.05	0.03
B29	Conveyor Belt to Conveyor Belt; Dome Bypass (alternate scenario)	615	5,387,400	Included with EU: B25			0	0
	Conveyor Belt to Stockpile; Dome Bypass (alternate scenario)	615	5,387,400					
B34	Conveyor to Hopper Feeder	615	5,387,400	6.90E-06	0.0011	1	0.02	2.96
B35	Hopper Bin	615	5,387,400	1.65E-04	0.0011	1	0.44	2.96
B32	Hopper to Conveyor Belt	615	5,387,400	6.90E-06	0.0011	1	0.02	2.96
B33	Hopper to Conveyor Belt (alternate)	615	5,387,400	Included with B32			0	0

EU	Description	Throughput		PM ₁₀ EF (lbs/ton)	PM ₁₀ EF (lbs/ton)	CF	PM ₁₀ (tons/yr)	PM ₁₀ (tons/yr)
		tons/hr	tons/yr					
B36	Rotary Dryer #2 (aggregate processing)	615	5,387,400	0.30	2.00	1	808.11	5,387.40
T01	Truck Loading		100,000	1.50E-04	Calculated with DAQ Aggregate Tool		0.01	0.44
D1	Belt Feeder Drop from Dome	205	1,795,800	1.65E-04	0.0011	1	0.15	0.99
D2	Belt Feeder Drop from Dome	205	1,795,800	1.65E-04	0.0011	1	0.15	0.99
D3	Belt Feeder Drop from Dome	205	1,795,800	1.65E-04	0.0011	1	0.15	0.99
D4	Conveyor Belt	615	5,387,400	Included with D43			0	0
D43	Conveyor Belt to Transfer Screen	615	5,387,400				0.04	56.76
	Transfer Station Screen	180	1,576,800	5.0E-05	0.072	1		
	Screen to Belt	150	1,314,000					
	Screen to Transfer Station Crusher	30	262,800					
D44	Transfer Station Crusher	30	262,800	3.60E-04	0.0024	1	0.05	0.32
	Crusher to Belt	30	262,800	Included				
D5	Variable Splitter	615	5,387,400	1.65E-04	0.0011	0.1	0.04	0.30
D6	Bypass Conveyor	615	5,387,400	1.65E-04	0.0011	0.1	0.04	0.30
D7	Conveyor Belt Drop	615	5,387,400	1.65E-04	0.0011	1	0.44	2.96
D8	Tripper Station	615	5,387,400	1.65E-04	0.0011	1	0.44	2.96
D9	Screw Conveyor	30	262,800	0.003	0.02	1	0.39	2.63
D18	Screw Conveyor	30	262,800	0.003	0.02	1	0.39	2.63
D27	Screw Conveyor	30	262,800	0.003	0.02	1	0.39	2.63
D10	Rock Bin #1	10	87,600	0.003	0.02	1	0.13	0.88
D11	Impeller Mill #1 (aggregate processing)	10	87,600	0.8175	5.45	1	35.81	238.71
D13	Rock Bin #2	10	87,600	0.003	0.02	1	0.13	0.88
D14	Impeller Mill #2 (aggregate processing)	10	87,600	0.8175	5.45	1	35.81	238.71
D16	Rock Bin #3	10	87,600	0.003	0.02	1	0.13	0.88
D17	Impeller Mill #3 (aggregate processing)	10	87,600	0.8175	5.45	1	35.81	238.71
D19	Rock Bin #4	10	87,600	0.003	0.02	1	0.13	0.88
D20	Impeller Mill #4 (aggregate processing)	10	87,600	0.8175	5.45	1	35.81	238.71
D22	Rock Bin #5	10	87,600	0.003	0.02	1	0.13	0.88
D23	Impeller Mill #5 (aggregate processing)	10	87,600	0.8175	5.45	1	35.81	238.71
D25	Rock Bin #6	10	87,600	0.003	0.02	1	0.13	0.88
D26	Impeller Mill #6 (aggregate processing)	10	87,600	0.8175	5.45	1	35.81	238.71
D28	Rock Bin #7	10	87,600	0.003	0.02	1	0.13	0.88
D29	Impeller Mill #7 (aggregate processing)	10	87,600	0.8175	5.45	1	35.81	238.71
D31	Rock Bin #8	10	87,600	0.003	0.02	1	0.13	0.88
D32	Impeller Mill #8 (aggregate processing)	10	87,600	0.8175	5.45	1	35.81	238.71
D34	Rock Bin #9	10	87,600	0.003	0.02	1	0.13	0.88
D35	Impeller Mill #9 (aggregate processing)	10	87,600	0.8175	5.45	1	35.81	238.71
D36	Screw Conveyor to Screw Conveyor	90	788,400	0.003	0.02	1	7.10	47.30
	Screw Conveyor to Screw Conveyor	90	788,400	0.003	0.02	1		
	Screw Conveyor to Screw Conveyor	90	788,400	0.003	0.02	1		
	Screw Conveyor to Stucco Elevator	90	788,400	0.003	0.02	1		
	Screw Conveyor to Screw Conveyor	90	788,400	0.003	0.02	1		
	Screw Conveyor to Screw Conveyor	90	788,400	0.003	0.02	1		

EU	Description	Throughput		PM ₁₀ EF (lbs/ton)	PM ₁₀ EF (lbs/ton)	CF	PM ₁₀ (tons/yr)	PM ₁₀ (tons/yr)
		tons/hr	tons/yr					
D42	Screw Conveyor to Screw Conveyor	90	788,400	0.003	0.02	1	1.18	7.88
E1	Stucco Elevator #1A	45	394,200	0.00345	0.023	1	0.68	4.53
E2	Screw Conveyor	45	394,200	0.00345	0.023	1	0.68	4.53
E3	Stucco Bin #1	45	394,200	0.00345	0.023	1	0.68	4.53
E4	Screw Conveyor	45	394,200	0.00345	0.023	1	0.68	4.53
E5	Entoleter Elevator	45	394,200	0.00345	0.023	1	0.68	4.53
E6	Transfer Point	45	394,200	0.00345	0.023	1	0.68	4.53
E7	Entoleter (Mill)	45	394,200	0.003	0.002	1	0.59	0.39
E8	Screw Conveyor	45	394,200	0.00345	0.023	1	0.68	4.53
E9	Screw Conveyor	45	394,200	0.00345	0.023	1	0.68	4.53
E10	Stucco Elevator #1	45	394,200	0.00345	0.023	1	0.68	4.53
E11	Screw Conveyor	45	394,200	0.00345	0.023	1	0.68	4.53
E12	Stucco Bin #2	75	657,000	0.00345	0.023	1	1.13	7.56
E13	Rotary Valve	75	657,000	0.00345	0.023	1	1.13	7.56
E14	Bin #2 Discharge Screw	75	657,000	0.00345	0.023	1	1.13	7.56
E15	Transfer Point	75	657,000	0.00345	0.023	1	1.13	7.56
E16	Scalping Screw	33	289,080	0.00345	0.023	1	0.50	3.32
E17	Scale (Transfer Point)	33	289,080	0.00345	0.023	1	0.50	3.32
E18	Return Screw	33	289,080	0.00345	0.023	1	0.50	3.32
E19	Stucco Recirculating Elevator	33	289,080	0.00345	0.023	1	0.50	3.32
E20	Bin Recirculation Screw	33	289,080	0.00345	0.023	1	0.50	3.32
E21	Rotary Valve	52.48	459,725	0.00345	0.023	1	0.79	5.29
E22	Live Bottom Bin	52.48	459,725	0.00345	0.023	1	0.79	5.29
E23	Metering Screw Conveyor	52.48	459,725	0.00345	0.023	1	0.79	5.29
E25	Accelerator Bin	0.63	5,519	0.00345	0.023	1	0.01	0.06
E26	Feeder	0.63	5,519	0.00345	0.023	1	0.01	0.06
E27	Additive Bin	0.95	8,322	0.00345	0.023	1	0.01	0.10
E27a	Additive Bin/Feeder	0.95	8,322	0.00345	0.023	1	0.01	0.10
E29	Additive Bin	0.95	8,322	0.00345	0.023	1	0.01	0.10
E31	Additive Bin	0.95	8,322	0.00345	0.023	1	0.01	0.10
E33	Additive Bin	0.95	8,322	0.00345	0.023	1	0.01	0.10
E28	Feeder	0.95	8,322	0.00345	0.023	1	0.01	0.10
E30	Feeder	0.95	8,322	0.00345	0.023	1	0.01	0.10
E32	Feeder	0.95	8,322	0.00345	0.023	1	0.01	0.10
E34	Feeder	0.95	8,322	0.00345	0.023	1	0.01	0.10
E43	Feeder	0.95	8,322	0.00345	0.023	1	0.01	0.10
E24	Mixing Screw Conveyor	90	788,400	0.00345	0.023	1	1.36	9.07
E35	Mixer	90	788,400	0.00345	0.023	1	1.36	9.07
E37	End Saw	58,334 ft ² /hr	511,005,840 ft ² /yr	1.71E-04 lb/ft ²	0.00114 lb/ft ²	1	43.69	291.27
E37a	End Saw to Conveyor		10,000	0.00345	0.023	1	0.09	0.62
	Conveyor to Bunker		10,000	0.00345	0.023	1		
	Wind Erosion		10,000	0.00765	0.051	1		
	Loader to Recycle Stockpile		10,000	0.00345	0.023	1		

EU	Description	Throughput		PM ₁₀ EF (lbs/ton)	PM ₁₀ EF (lbs/ton)	CF	PM ₁₀ (tons/yr)	PM ₁₀ (tons/yr)
		tons/hr	tons/yr					
E41	Dunnage/Slutter system		36,000,000 ft ² /yr	0.001026 lb/ft ²	0.00684 lb/ft ²	1	18.47	123.12
E42	Cutback Saw Process		2,750,000 ² ft ² /yr	0.0002672 lb/ft ²	0.001781 lb/ft ²	1	0.37	2.45
F1	Screw Conveyor	2.65	23,214	0	Enclosed		0	0
F2	Vacuum Feed	2.65	23,214	0	Enclosed		0	0
F3	Storage Bin	2.65	23,214	0	Enclosed		0	0
F4	Storage Bin	2.65	23,214	0	Enclosed		0	0
F5	Crusher	6.0	52,560	0	Enclosed		0	0
F6	Screw Conveyor	1.0	8,760	0	Enclosed		0	0
F7	Ball Mill	1.0	8,760	0	Enclosed		0	0
F8	Elevator Conveyor	1.0	8,760	0	Enclosed		0	0
G1	Screw Conveyor Drop	55.5	486,180	0.003	0.02	1	0.73	4.86
G12	Screw Conveyor Drop	91.7	803,292	0.003	0.02	1	1.20	8.03
G2	Rock Bin #10	30	262,800	0.003	0.02	1	0.39	2.62
G3	Impeller Mill #10 (aggregate only)	30	262,800	0.8175	5.45	1	107.42	716.13
G4	Double Cone Classifier	30	262,800	0.003	0.02	1	0.39	2.62
G5	Cyclone Collector	30	262,800	0.003	0.02	1	0.39	716.13
G7	Rock Bin #11	30	262,800	0.003	0.02	1	0.39	2.62
G8	Impeller Mill #11 (aggregate only)	30	262,800	0.8175	5.45	1	107.42	716.13
G9	Double Cone Classifier	30	262,800	0.003	0.02	1	0.39	2.62
G10	Cyclone Collector	30	262,800	0.003	0.02	1	0.39	2.62
G13	Rock Bin #12	30	262,800	0.003	0.02	1	0.39	2.62
G14	Impeller Mill #12 (aggregate only)	30	262,800	0.8175	5.45	1	107.42	716.13
G15	Double Cone Classifier	30	262,800	0.003	0.02	1	0.39	2.62
G16	Cyclone Collector	30	262,800	0.003	0.02	1	0.39	2.62
G18	Rock Bin #13	30	262,800	0.003	0.02	1	0.39	2.62
G19	Impeller Mill #13 (aggregate only)	30	262,800	0.8175	5.45	1	107.42	716.13
G20	Double Cone Classifier	30	262,800	0.003	0.02	1	0.39	2.62
G21	Cyclone Collector	30	262,800	0.003	0.02	1	0.39	2.62
G6	Feed Screw Conveyor Drop	27.8	243,528	0.003	0.02	1	0.37	2.43
G11	Feed Screw Conveyor Drop	27.8	243,528	0.003	0.02	1	0.37	2.43
G17	Feed Screw Conveyor Drop	45.8	401,208	0.003	0.02	1	0.60	4.01
G22	Feed Screw Conveyor Drop	45.8	401,208	0.003	0.02	1	0.60	4.01
H1	Stucco Storage Bin #3	27.8	243,528	0.003	0.02	1	0.37	2.43
H2	Stucco Storage Bin #4	27.8	243,528	0.003	0.02	1	0.37	2.43
H3	Stucco Screw Conveyor	55.5	486,180	0.003	0.02	1	0.73	4.86
H4	Stucco Bucket Elevator	55.5	486,180	0.003	0.02	1	0.73	4.86
H5	Recirculating Screw Conveyor	55.5	486,180	0.003	0.02	1	0.73	4.86
H7	Stucco Feed Elevator	55.5	486,180	0.003	0.02	1	0.73	4.86
H8	Stucco Metering	55.5	486,180	0.003	0.02	1	0.73	4.86
H6	Stucco Surge Bin	55.5	486,180	0.003	0.02	1	0.73	4.86
H11	Additive Bin	20.5	179,580	0.003	0.02	1	0.27	1.80
H11a	Additive Bin/Feeder	20.5	179,580	0.003	0.02	1	0.27	1.80
H13	Additive Bin	20.5	179,580	0.003	0.02	1	0.27	1.80

EU	Description	Throughput		PM ₁₀ EF (lbs/ton)	PM ₁₀ EF (lbs/ton)	CF	PM ₁₀ (tons/yr)	PM ₁₀ (tons/yr)
		tons/hr	tons/yr					
H15	Additive Bin	20.5	179,580	0.003	0.02	1	0.27	1.80
H19	Additive Bin	20.5	179,580	0.003	0.02	1	0.27	1.80
H17	Accelerator Bin	4.66	40,822	0.003	0.02	1	0.06	0.41
H12	Feeder	20.5	179,580	0.003	0.02	1	0.27	1.80
H14	Feeder	20.5	179,580	0.003	0.02	1	0.27	1.80
H16	Feeder	20.5	179,580	0.003	0.02	1	0.27	1.80
H18	Feeder	20.5	179,580	0.003	0.02	1	0.27	1.80
H20	Feeder	20.5	179,580	0.003	0.02	1	0.27	1.80
H37	Feeder	20.5	179,580	0.003	0.02	1	0.27	1.80
H10	Mixing Screw Conveyor	107.2	939,072	0.003	0.02	1	1.41	9.39
H22	Pin Mixer	107.2	939,072	0.003	0.02	1	1.41	9.39
H24	End Saw	100,000 ft ² /hr	876,000,000 ft ² /yr	0.000171	0.00114 lb/ft ²	1	74.90	499.32
H27	Stucco Storage Bin #5	46	402,960	0.003	0.02	1	0.60	4.03
H28	Stucco Screw Conveyor	46	402,960	0.003	0.02	1	0.60	4.03
H29	Recirculating Screw Conveyor	46	402,960	0.003	0.02	1	0.60	4.03
H30	End Saw	100,000 ft ² /yr	876,000,000 ft ² /yr	0.000171	0.00114 lb/ft ²	1	74.90	499.32
H33	Stucco Cooler	147.2	1,289,472	0.003	0.02	1	1.93	12.89
H34	Stucco Screw Conveyor	73.6	644,736	0.003	0.02	1	0.97	6.45
H35	Stucco Screw Conveyor	73.6	644,736	0.003	0.02	1	0.97	6.45
I01	Cooling Tower; 1,200 gpm; 6,000 ppm	1 hour	8,760 hr/yr	Drift Loss: 0.001%			0.07	0.07
I02	Cooling Tower; 1,200 gpm; 6,000 ppm	1 hour	8,760 hr/yr	Drift Loss: 0.001%			0.07	0.07
I03	Cooling Tower; 3,495 gpm; 6,000 ppm	1 hour	8,760 hr/yr	Drift Loss: 0.001%			0.22	0.22
K01	Screw Grinder	20	175,200	0.00225	0.015	1	0.20	1.31
K02	Perforated Screw Conveyor	20	175,200	0.00021	0.0014	1	0.02	0.12
K04	Belt Conveyor	20	175,200	0.00021	0.0014	1	0.02	0.12
K05	Roller Mill	19.2	168,972	0.00225	0.015	1	0.19	1.7
K06	Vibratory Screen	19.2	168,972	0.00225	0.015	1	0.19	1.27
K07	Belt Conveyor to Belt Conveyor	19	166,440	0.00021	0.0014	1	0.06	0.35
	Belt Conveyor to Belt Conveyor	19	166,440	0.00021	0.0014	1		
	Belt Conveyor to Storage Bin	19	166,440	0.00021	0.0014	1		
K10	Storage Bin	40	350,400	0.00021	0.0014	1	0.04	0.25
K11	Screw Conveyor to Screw Conveyor	19	166,440	0.00021	0.0014	1	0.06	0.35
	Screw Conveyor to Screw Conveyor	19	166,440	0.00021	0.0014	1		
	Screw Conveyor to Conveyor Belt (EU: D7)	19	166,440	0.00021	0.0014	1		
							1833.52	13,223.91

¹Calculated with DES web-based aggregate tool.

A-2: SDE Calculations (combustion units)

EU	Description	Annual Throughput	Pollutant	EF	PTE (tons/yr)
B36	Rotary Dryer 2: 90 MMBtu/hr	8,760 hours/year	PM ₁₀	0.0137 lbs/MMBtu	5.40
			PM _{2.5}	0.0136 lbs/MMBtu	5.36
			NO _x	0.0400 lbs/MMBtu	15.77
			CO	0.1540 lbs/MMBtu	60.71
			SO ₂	0.0006 lbs/MMBtu	0.24
			VOCs	0.0028 lbs/MMBtu	1.10
			HAPs	0.0019 lbs/MMBtu	0.75
D11, D14, D17, D20, D23, D26,D29, D32, D35	Impeller Mills 1-9: 5.0 MMBtu/hr (each)	8,760 hours/year (per unit) Emission calculations for this section of the table are per individual emission unit	PM ₁₀	0.012 lbs/MMBtu	0.26
			PM _{2.5}	0.0119 lbs/MMBtu	0.26
			NO _x	0.0065 lbs/MMBtu	1.42
			CO	0.0102 lbs/MMBtu	0.22
			SO ₂	0.0006 lbs/MMBtu	0.01
			VOCs	0.00528 lbs/MMBtu	0.12
			HAPs	0.0019 lbs/MMBtu	0.04
E23a	Paper Heater: 4.625 MMBtu/hr	8,760 hours/year	PM ₁₀	0.0075 lbs/MMBtu	0.15
			PM _{2.5}	0.0075 lbs/MMBtu	0.15
			NO _x	0.122 lbs/MMBtu	2.47
			CO	0.148 lbs/MMBtu	3.00
			SO ₂	0.0006 lbs/MMBtu	0.01
			VOCs	0.0054 lbs/MMBtu	0.11
			HAPs	0.0019 lbs/MMBtu	0.04
E39 ¹	Coe Board Dryer	1,950,370 tons/year NCA Gas (primary operating scenario)	PM ₁₀	0.00378 lbs/ton	3.69
			PM _{2.5}	0.00374 lbs/ton	3.65
			NO _x	0.0786 lbs/ton	76.65
			CO	0.26 lbs/ton	253.55
			SO ₂	0.0027 lbs/ton	2.63
			VOCs	0.00768 lbs/ton	7.49
			HAPs	0.00276 lbs/ton	2.69
		Coe burners 110 MMBtu/hr (alternate operating scenario)	PM ₁₀	0.0137 lb/MMBtu	6.60
			PM _{2.5}	0.0137 lb/MMBtu	6.55
			NO _x	0.14 lb/MMBtu	67.45
			CO	0.035 lb/MMBtu	16.86
			SO ₂	0.0006 lb/MMBtu	0.29
			VOCs	0.0028 lb/MMBtu	1.35
			HAPs	0.00100 lb/MMBtu	0.48
G3, G8	Impeller Mills 10 and11: 19.0 MMBtu/hr (each)	8,760 hours/year (per unit) Emission calculations for this section of the table are per individual emission unit	PM ₁₀	0.0120 lbs/MMBtu	1.00
			PM _{2.5}	0.0119 lbs/MMBtu	0.99
			NO _x	0.10 lbs/MMBtu	8.32
			CO	0.021 lbs/MMBtu	1.75
			SO ₂	0.0006 lbs/MMBtu	0.05
			VOCs	0.0053 lbs/MMBtu	0.44
			HAPs	0.00186 lbs/MMBtu	0.15

EU	Description	Annual Throughput	Pollutant	EF	PTE (tons/yr)
G14, G19	Impeller Mills 10 and 11: 22.5 MMBtu/hr (each)	8,760 hours/year (per unit) Emission calculations for this section of the table are per individual emission unit	PM ₁₀	0.0076 lbs/MMBtu	0.75
			PM _{2.5}	0.0075 lbs/MMBtu	0.74
			NO _x	0.14 lbs/MMBtu	13.80
			CO	0.084 lbs/MMBtu	8.28
			SO ₂	0.0006 lbs/MMBtu	0.06
			VOCs	0.0055 lbs/MMBtu	0.54
			HAPs	0.00198 lbs/MMBtu	0.20
H20a	Paper Heater: 5.25 MMBtu/hr	8,760 hours/year	PM ₁₀	0.0075 lbs/MMBtu	0.17
			PM _{2.5}	0.0075 lbs/MMBtu	0.17
			NO _x	0.122 lbs/MMBtu	2.81
			CO	0.149 lbs/MMBtu	3.43
			SO ₂	0.0006 lbs/MMBtu	0.01
			VOCs	0.0054 lbs/MMBtu	0.12
			HAPs	0.0019 lbs/MMBtu	0.04
H26	Flakt Dryer, Combustion Zone 1: 50 MMBtu/hr	8,760 hours/year	PM ₁₀	0.0138 lbs/MMBtu	3.02
			PM _{2.5}	0.0137 lbs/MMBtu	3.00
			NO _x	See Table A-3	
			CO	See Table A-3	
			SO ₂	0.0006 lbs/MMBtu	0.13
			VOCs	See Table A-3	
			HAPs	0.00198 lbs/MMBtu	0.43
H26	Combustion Zone 2: 39 MMBtu/hr	8,760 hours/year	PM ₁₀	0.0138 lbs/MMBtu	2.36
			PM _{2.5}	0.0137 lbs/MMBtu	2.34
			NO _x	See Table A-3	
			CO	See Table A-3	
			SO ₂	0.0006 lbs/MMBtu	0.10
			VOCs	See Table A-3	
			HAPs	0.00198 lbs/MMBtu	0.34
H32	Combustion Zone 3: 18 MMBtu/hr	8,760 hours/year	PM ₁₀	0.0138 lbs/MMBtu	1.09
			PM _{2.5}	0.0137 lbs/MMBtu	1.08
			NO _x	See Table A-3	
			CO	See Table A-3	
			SO ₂	0.0006 lbs/MMBtu	0.05
			VOCs	See Table A-3	
			HAPs	0.00198 lbs/MMBtu	0.16
H32	Flak Dryer, Combustion Zones 1 & 2: 45 MMBtu/hr	8,760 hours/year (per zone) Emission calculations for this section of the table are per individual emission unit	PM ₁₀	0.0076 lbs/MMBtu	1.50
			PM _{2.5}	0.0075 lbs/MMBtu	1.48
			NO _x	0.14 lbs/MMBtu	27.59
			CO	0.084 lbs/MMBtu	16.56
			SO ₂	0.0006 lbs/MMBtu	0.12
			VOCs	0.0055 lbs/MMBtu	1.08
			HAPs	0.00198 lbs/MMBtu	0.39

EU	Description	Annual Throughput	Pollutant	EF	PTE (tons/yr)	
	Combustion Zone 3: 30 MMBtu/hr	8,760 hours/year	PM ₁₀	0.0076 lbs/MMBtu	1.00	
			PM _{2.5}	0.0075 lbs/MMBtu	0.99	
			NO _x	0.14 lbs/MMBtu	18.40	
			CO	0.084 lbs/MMBtu	11.04	
			SO ₂	0.0006 lbs/MMBtu	0.08	
			VOCs	0.0055 lbs/MMBtu	0.72	
			HAPs	0.00198 lbs/MMBtu	0.26	
U03	Diesel-Powered Water Pump: 464 hp	8,760 hours/year	PM ₁₀	1.54E-04 lbs/hp-hr	0.31	
			PM _{2.5}	1.54E-04 lbs/hp-hr	0.31	
			NO _x	5.73E-03 lbs/hp-hr	11.65	
			CO	3.75E-03 lbs/hp-hr	7.62	
			SO ₂	1.21E-05 lbs/hp-hr	0.02	
			VOCs	2.51E-03 lbs/hp-hr	5.11	
			HAPs	2.71E-05 lbs/hp-hr	0.06	
U04, U05	Diesel-Powered Fire Pump: 240 hp (each)	500 hours/year (per unit) Emission calculations for this section of the table are per individual emission unit	PM ₁₀	4.85E-04 lbs/hp-hr	0.03	
			PM _{2.5}	4.85E-04 lbs/hp-hr	0.03	
			NO _x	7.19E-03 lbs/hp-hr	0.43	
			CO	1.30E-03 lbs/hp-hr	0.08	
			SO ₂	1.21E-05 lbs/hp-hr	0.01	
			VOCs	4.85E-03 lbs/hp-hr	0.03	
			HAPs	2.71E-05 lbs/hp-hr	0.01	
U06	Diesel-Powered Water Pump: 85 hp	8,760 hours/year	PM ₁₀	4.85E-04 lbs/hp-hr	0.82	
			PM _{2.5}	4.85E-04 lbs/hp-hr	0.82	
			NO _x	7.19E-03 lbs/hp-hr	5.34	
			CO	1.30E-03 lbs/hp-hr	2.46	
			SO ₂	1.21E-05 lbs/hp-hr	0.01	
			VOCs	4.85E-03 lbs/hp-hr	0.18	
			HAPs	2.71E-05 lbs/hp-hr	0.01	
Totals:	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	
	32.33	29.55	245.53	403.13	3.81	
					VOC	HAP
					21.35	6.64

A-3. SDE Calculations for Flakt Dryer (EU: H26)

Emission Factors (lb/hr)			hr/yr	PTE (ton/yr)		
NOx	CO	VOC	8,760	NOx	CO	VOC
13.04	11.81	0.47		57.12	51.73	2.06

A-4. SDE Calculations for Gasoline Dispensing (tons/year)

EU	EU Description	Annual Throughput	Pollutant	EF	EF Description	PTE
J01	Gasoline Dispensing	22,000 gallons	VOCs		Standing Loss ¹	2.60
					Working Loss ¹	0.04
				0.011 lbs/gal ²	Dispensing	0.12
				0.0007 lbs/gal ²	Spillage	0.01
			HAPs	HAP compounds = 28% of VOCs		0.78

¹Emissions calculated using TANKS emissions estimation software from the U.S. Environmental Protection Agency (EPA).

²Emission factors from AP-42 Table 5.2-7

A-5. SDE Calculations for Printing Operation (tons per year)

EU	Description	Throughput (lbs/year)	Pollutant	VOC Content (%)	PTE
H36	Alpha Foamer	1,314,000	VOCs	16	105.12
	Black Ink	1,489		11	0.05
	Silicone	283,200		2	2.83
E40	Alpha Foamer	946,080	VOCs	16	75.69
	Black Ink	1,226		99	0.61
	Make-Up Ink	1,577		100	0.79
	Silicone	188,800		2	1.89
Total					186.98

A-6. SDE Total (tons per year)

Source	PM ₁₀	PM _{2.5}	NOx	CO	SO ₂	VOC	HAP
Noncombustion	13,223.91	1,833.52	0	0	0	0	0
Combustion	32.33	29.55	302.65	454.86	3.81	23.41	6.64
Gasoline Dispensing	0	0	0	0	0	2.77	0.78
Printing	0	0	0	0	0	186.98	0
Total	13,256.24	1,863.07	302.65	454.86	3.81	213.16	7.42

A-7. Source PTE

EU	Throughput	PM ₁₀	PM _{2.5}	NOx	CO	SO ₂	VOC	HAP
A1	2,300,000 tons/yr	0.11	0.02	0	0	0	0	0
A5	10,000 holes/yr	3.40	0.20	0	0	0	0	0
	58 blasts/yr	2.36	0.14	0	0	0	0	0
	750 tons/yr (ANFO)	0	0	4.70	16.55	0.84	0	0
B1	2,300,000 tons/yr	0.05	0.01	0	0	0	0	0
B2	2,300,000 tons/yr	0.62	0.09	0	0	0	0	0
B3	2,300,000 tons/yr	0.26	0.04	0	0	0	0	0
B37	2,300,000 tons/yr	0.05	0.01	0	0	0	0	0
S07	2,300,000 tons/yr	Included w/B40		0	0	0	0	0
B40	2,300,000 tons/yr	2.53	0.17	0	0	0	0	0
B42	2,300,000 tons/yr	0.05	0.01	0	0	0	0	0
B41	2,300,000 tons/yr	0.62	0.09	0	0	0	0	0
S13	2,300,000 tons/yr	0.05	0.01	0	0	0	0	0

EU	Throughput	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP
B25	2,300,000 tons/yr	0.02	0.01	0	0	0	0	0
B28	1.13 Acres	0.03	0.01	0	0	0	0	0
B29	2,300,000 tons/yr	Included w/B25		0	0	0	0	0
B34	2,300,000 tons/yr	0.05	0.01	0	0	0	0	0
B35	2,300,000 tons/yr	0.01	0.01	0	0	0	0	0
B32	2,300,000 tons/yr	0.05	0.01	0	0	0	0	0
B33	2,300,000 tons/yr	Included w/B32		0	0	0	0	0
B36	2,300,000 tons/yr	11.53	1.76	15.77	60.71	0.24	1.10	0.75
T01	100,000 tons/yr	0.05	0.01	0	0	0	0	0
D1	766,667 tons/yr	0.01	0.01	0	0	0	0	0
D2	766,667 tons/yr	0.01	0.01	0	0	0	0	0
D3	766,667 tons/yr	0.01	0.01	0	0	0	0	0
D4	2,300,000 tons/yr	Included w/D43		0	0	0	0	0
D43	2,300,000 tons/yr	0.41	0.01	0	0	0	0	0
D44	262,800 tons/yr	0.01	0.01	0	0	0	0	0
D5	2,300,000 tons/yr	0.13	0.02	0	0	0	0	0
D6	2,300,000 tons/yr	0.13	0.02	0	0	0	0	0
D7	2,300,000 tons/yr	0.01	0.01	0	0	0	0	0
D8	2,300,000 tons/yr	0.01	0.01	0	0	0	0	0
D9	122,667 tons/yr	0.01	0.01	0	0	0	0	0
D18	122,667 tons/yr	0.01	0.01	0	0	0	0	0
D27	122,667 tons/yr	0.01	0.01	0	0	0	0	0
D10	40,889 tons/yr	0.01	0.01	0	0	0	0	0
D11	40,889 tons/yr	0.57	0.09	1.42	0.22	0.01	0.12	0.04
D13	40,889 tons/yr	0.01	0.01	0	0	0	0	0
D14	40,889 tons/yr	0.57	0.09	1.42	0.22	0.01	0.12	0.04
D16	40,889 tons/yr	0.01	0.01	0	0	0	0	0
D17	40,889 tons/yr	0.57	0.09	1.42	0.22	0.01	0.12	0.04
D19	40,889 tons/yr	0.01	0.01	0	0	0	0	0
D20	40,889 tons/yr	0.57	0.09	1.42	0.22	0.01	0.12	0.04
D22	40,889 tons/yr	0.01	0.01	0	0	0	0	0
D23	40,889 tons/yr	0.57	0.09	1.42	0.22	0.01	0.12	0.04
D25	40,889 tons/yr	0.01	0.01	0	0	0	0	0
D26	40,889 tons/yr	0.57	0.09	1.42	0.22	0.01	0.12	0.04
D28	40,889 tons/yr	0.01	0.01	0	0	0	0	0
D29	40,889 tons/yr	0.57	0.09	1.42	0.22	0.01	0.12	0.04
D31	40,889 tons/yr	0.01	0.01	0	0	0	0	0
D32	40,889 tons/yr	0.57	0.09	1.42	0.22	0.01	0.12	0.04
D34	40,889 tons/yr	0.01	0.01	0	0	0	0	0
D35	40,889 tons/yr	0.57	0.09	1.42	0.22	0.01	0.12	0.04
D36	55,200 tons/yr	0.02	0.01	0	0	0	0	0
D42	331,200 tons/yr	0.33	0.05	0	0	0	0	0

EU	Throughput	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP
E1	331,200 tons/yr	0.02	0.01	0	0	0	0	0
E2	331,200 tons/yr	0.02	0.01	0	0	0	0	0
E3	331,200 tons/yr	0.02	0.01	0	0	0	0	0
E4	331,200 tons/yr	0.02	0.01	0	0	0	0	0
E5	331,200 tons/yr	0.02	0.01	0	0	0	0	0
E6	331,200 tons/yr	0.02	0.01	0	0	0	0	0
E7	331,200 tons/yr	0.01	0.01	0	0	0	0	0
E8	331,200 tons/yr	0.02	0.01	0	0	0	0	0
E9	331,200 tons/yr	0.02	0.01	0	0	0	0	0
E10	331,200 tons/yr	0.02	0.01	0	0	0	0	0
E11	331,200 tons/yr	0.02	0.01	0	0	0	0	0
E12	397,400 tons/yr	0.02	0.01	0	0	0	0	0
E13	397,400 tons/yr	0.02	0.01	0	0	0	0	0
E14	397,400 tons/yr	0.02	0.01	0	0	0	0	0
E15	397,400 tons/yr	0.02	0.01	0	0	0	0	0
E16	397,400 tons/yr	0.02	0.01	0	0	0	0	0
E17	397,400 tons/yr	0.02	0.01	0	0	0	0	0
E18	66,240 tons/yr	0.01	0.01	0	0	0	0	0
E19	66,240 tons/yr	0.01	0.01	0	0	0	0	0
E20	66,240 tons/yr	0.01	0.01	0	0	0	0	0
E21	397,400 tons/yr	0.02	0.01	0	0	0	0	0
E22	397,400 tons/yr	0.02	0.01	0	0	0	0	0
E23	397,400 tons/yr	0.02	0.01	0	0	0	0	0
E23a	8,760 hours/yr	0.15	0.15	2.47	3.00	0.01	0.11	0.04
E25	1,197 tons/yr	0.01	0.01	0	0	0	0	0
E26	1,197 tons/yr	0.01	0.01	0	0	0	0	0
E27	8,346 tons/yr	0.01	0.01	0	0	0	0	0
E27a	8,346 tons/yr	0.10	0.01	0	0	0	0	0
E29	8,346 tons/yr	0.01	0.01	0	0	0	0	0
E31	8,346 tons/yr	0.01	0.01	0	0	0	0	0
E33	8,346 tons/yr	0.01	0.01	0	0	0	0	0
E28	8,346 tons/yr	0.01	0.01	0	0	0	0	0
E30	8,346 tons/yr	0.01	0.01	0	0	0	0	0
E32	8,346 tons/yr	0.01	0.01	0	0	0	0	0
E34	8,346 tons/yr	0.01	0.01	0	0	0	0	0
E43	44 tons/yr	0.01	0.01	0	0	0	0	0
E24	450,000 tons/yr	0.03	0.01	0	0	0	0	0
E35	450,000 tons/yr	0.03	0.01	0	0	0	0	0
E37	450,000,000 ft ² /yr	1.28	0.19	0	0	0	0	0
E37a	10,000 tons/yr	0.60	0.09	0	0	0	0	0
E39	8,760 hours/yr	6.60	6.55	76.65	253.55	2.63	7.49	2.69
E40	554,100 lbs/yr	0	0	0	0	0	24.88	0

EU	Throughput	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP
E41	36,000,000 ft ² /yr	0.62	0.09	0	0	0	0	0
E42	2,750,000 ft ² /yr	0.01	0.01	0	0	0	0	0
F1	23,214 tons/yr	0	0	0	0	0	0	0
F2	23,214 tons/yr	0	0	0	0	0	0	0
F3	23,214 tons/yr	0	0	0	0	0	0	0
F4	23,214 tons/yr	0	0	0	0	0	0	0
F5	52,560 tons/yr	0	0	0	0	0	0	0
F6	23,214 tons/yr	0	0	0	0	0	0	0
F7	23,214 tons/yr	0	0	0	0	0	0	0
F8	23,214 tons/yr	0	0	0	0	0	0	0
G1	452,000 tons/yr	0.02	0.01	0	0	0	0	0
G12	580,000 tons/yr	0.03	0.01	0	0	0	0	0
G2	226,000 tons/yr	0.01	0.01	0	0	0	0	0
G3	226,000 tons/yr	4.08	1.45	8.32	1.75	0.05	0.44	0.15
G4	226,000 tons/yr	0.01	0.01	0	0	0	0	0
G5	226,000 tons/yr	0.01	0.01	0	0	0	0	0
G7	226,000 tons/yr	0.01	0.01	0	0	0	0	0
G8	226,000 tons/yr	4.08	1.45	8.32	1.75	0.05	0.44	0.15
G9	226,000 tons/yr	0.01	0.01	0	0	0	0	0
G10	226,000 tons/yr	0.01	0.01	0	0	0	0	0
G13	290,000 tons/yr	0.01	0.01	0	0	0	0	0
G14	290,000 tons/yr	4.70	1.33	13.80	8.28	0.06	0.54	0.20
G15	290,000 tons/yr	0.01	0.01	0	0	0	0	0
G16	290,000 tons/yr	0.01	0.01	0	0	0	0	0
G18	290,000 tons/yr	0.01	0.01	0	0	0	0	0
G19	290,000 tons/yr	4.70	1.33	13.80	8.28	0.06	0.54	0.20
G20	290,000 tons/yr	0.01	0.01	0	0	0	0	0
G21	290,000 tons/yr	0.01	0.01	0	0	0	0	0
G6	452,000 tons/yr	0.02	0.01	0	0	0	0	0
G11	452,000 tons/yr	0.02	0.01	0	0	0	0	0
G17	580,000 tons/yr	0.03	0.01	0	0	0	0	0
G22	580,000 tons/yr	0.03	0.01	0	0	0	0	0
H1	516,000 tons/yr	0.03	0.01	0	0	0	0	0
H2	516,000 tons/yr	0.03	0.01	0	0	0	0	0
H3	1,032,000 tons/yr	0.05	0.01	0	0	0	0	0
H4	1,032,000 tons/yr	0.05	0.01	0	0	0	0	0
H5	516,000 tons/yr	0.03	0.01	0	0	0	0	0
H7	1,032,000 tons/yr	0.05	0.01	0	0	0	0	0
H8	1,032,000 tons/yr	0.05	0.01	0	0	0	0	0
H6	1,032,000 tons/yr	0.05	0.01	0	0	0	0	0
H11	119,500 tons/yr	0.01	0.01	0	0	0	0	0
H11a	119,500 tons/yr	1.20	0.18	0	0	0	0	0

EU	Throughput	PM₁₀	PM_{2.5}	NO_x	CO	SO₂	VOC	HAP
H13	119,500 tons/yr	0.01	0.01	0	0	0	0	0
H15	119,500 tons/yr	0.01	0.01	0	0	0	0	0
H19	119,500 tons/yr	0.01	0.01	0	0	0	0	0
H17	8,803 tons/yr	0.01	0.01	0	0	0	0	0
H12	119,500 tons/yr	0.01	0.01	0	0	0	0	0
H14	119,500 tons/yr	0.01	0.01	0	0	0	0	0
H16	119,500 tons/yr	0.01	0.01	0	0	0	0	0
H18	8,803 tons/yr	0.01	0.01	0	0	0	0	0
H20	119,500 tons/yr	0.01	0.01	0	0	0	0	0
H37	29 tons/yr	0.01	0.01	0	0	0	0	0
H20a	8,760 hours/yr	0.17	0.17	2.81	3.43	0.01	0.12	0.04
H10	1,638,332 tons/yr	0.08	0.01	0	0	0	0	0
H22	1,638,332 tons/yr	0.08	0.01	0	0	0	0	0
H24	650,000,000 ft ² /yr	1.85	0.28	0	0	0	0	0
H26	8,760 hours/yr	3.56	3.52	65.61	39.37	0.28	2.57	0.93
H27	580,000 tons/yr	0.03	0.01	0	0	0	0	0
H28	580,000 tons/yr	0.03	0.01	0	0	0	0	0
H29	580,000 tons/yr	0.03	0.01	0	0	0	0	0
H30	650,000,000 ft ² /yr	1.85	0.28	0	0	0	0	0
H32	8,760 hours/yr	4.00	3.95	73.58	44.16	0.32	2.88	1.04
H33	1,032,000 tons/yr	0.05	0.01	0	0	0	0	0
H34	516,000 tons/yr	0.03	0.01	0	0	0	0	0
H35	516,000 tons/yr	0.03	0.01	0	0	0	0	0
H36	579,300 lbs/yr	0	0	0	0	0	33.12	0
I01	8,760 hours/yr	0.07	0.07	0	0	0	0	0
I02	8,760 hours/yr	0.07	0.07	0	0	0	0	0
I03	8,760 hours/yr	0.22	0.22	0	0	0	0	0
J01	22,000 gallons/yr	0	0	0	0	0	2.77	0.78
K01	175,200 tons/yr	0.01	0.01	0	0	0	0	0
K02	175,200 tons/yr	0.01	0.01	0	0	0	0	0
K04	168,192 tons/yr	0.01	0.01	0	0	0	0	0
K05	168,192 tons/yr	0.01	0.01	0	0	0	0	0
K06	168,192 tons/yr	0.01	0.01	0	0	0	0	0
K07	168,192 tons/yr	0.01	0.01	0	0	0	0	0
K10	168,192 tons/yr	0.01	0.01	0	0	0	0	0
K11	168,192 tons/yr	0.01	0.01	0	0	0	0	0
U03	6,200 hours/yr	0.22	0.22	8.24	5.39	0.02	0.95	0.04
U04	500 hours/yr	0.03	0.03	0.43	0.08	0.01	0.03	0.01
U05	500 hours/yr	0.03	0.03	0.43	0.08	0.01	0.03	0.01
U06	800 hours/yr	0.07	0.07	0.49	0.22	0.01	0.02	0.01

EU	Throughput	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP
K14	72,550 VMT/yr (Unpaved)	27.46	2.78	0	0	0	0	0
	19,909 VMT/yr (Paved)	1.51	0.23	0	0	0	0	0
M1	90 Acres	26.92	4.04	0	0	0	0	0

PTE for Flakt Dryer (Zone 1)

EU#:	H26 - Combustion Zone 1			Emission Factor (lb/mmBtu)	Potential Emissions			
					lb/hr	lb/day	ton/yr	
Make:	Flakt			PM10	0.0138	0.69	16.56	3.02
Model:				PM2.5	0.0137	0.69	16.44	3.00
S/N:				NOx	0	0.00	0.00	0.00
	50.0 mmBtu/hr			CO	0.00E+00	0.00	0.00	0.00
	24.0 hr/day			SOx	0.0006	0.03	0.72	0.13
	8760 hr/yr			VOC	0.0000	0.00	0.00	0.00
				HAP	0.00198	0.10	2.38	0.43
BACT:		%O ₂	Lead		4.90E-07	2.45E-05	5.88E-04	1.07E-04
	ppm NOx	3.0						
	ppm CO	3.0						
Fuel:	Natural Gas	▼	2					

See Table A-3

See Table A-3

See Table A-3

PTE for Flakt Dryer (Zone 2)

EU#:	H26 - Combustion Zone 2			Emission Factor (lb/mmBtu)	Potential Emissions			
					lb/hr	lb/day	ton/yr	
Make:	Flakt			PM10	0.0138	0.54	12.92	2.36
Model:				PM2.5	0.0137	0.53	12.82	2.34
S/N:				NOx	0	0.00	0.00	0.00
	39.0 mmBtu/hr			CO	0.00E+00	0.00	0.00	0.00
	24.0 hr/day			SOx	0.0006	0.02	0.56	0.10
	8760 hr/yr			VOC	0.0000	0.00	0.00	0.00
		%O ₂	Lead		4.90E-07	2.45E-05	5.88E-04	1.07E-04
	ppm NOx	3.0						
	ppm CO	3.0						
Fuel:	Natural Gas	▼	2					

See Table A-3

See Table A-3

See Table A-3

PTE for Flakt Dryer (Zone 3)

EU#:	H26 - Combustion Zone 3		Emission Factor (lb/mmBtu)	Potential Emissions			
				lb/hr	lb/day	ton/yr	
Make:	Flakt		PM10	0.0138	0.25	5.96	1.09
Model:			PM2.5	0.0137	0.25	5.92	1.08
S/N:			NOx	0	0.00	0.00	0.00
18.0	mmBtu/hr		CO	0.00E+00	0.00	0.00	0.00
24.0	hr/day		SOx	0.0006	0.01	0.26	0.05
8760	hr/yr		VOC	0.0000	0.00	0.00	0.00
			HAP	0.00198	0.04	0.86	0.16
BACT:		%O2	Lead	4.90E-07	8.82E-06	2.12E-04	3.86E-05
	ppm NOx						
	3.0						
	ppm CO						
	3.0						
Fuel:	Natural Gas	<input type="button" value="▼"/>	2				

[See Table A-3](#)

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